

COLLECTION DEVICE FOR SINGLE STEP ASSAY OF ORAL FLUIDS

ABSTRACT OF THE DISCLOSURE

An apparatus and process for transporting aqueous fluid from the oral cavity to a lateral chromatographic strip for test is disclosed. A lateral chromatographic strip is placed within a cavity defined in a housing. The lateral chromatography strip extends within the cavity and is disposed along the housing to an inspection site. At least one inspection site to the lateral chromatographic strip is provided to enable inspection of selected sites on the lateral chromatographic strip for test results. A porous wick material protrudes from the housing to a collection site exterior of the housing at one end and communicates to the lateral chromatographic strip at the other end. This porous wick material has particulate construction, the particles adsorbing aqueous oral fluid to transport the fluid from the mouth to the lateral chromatographic strip without substantial absorption. The particles of the porous wick material are bound together to define a continuous interstitial volume for the flow of oral fluid to be transported and are treated to be hydrophilic to the adsorbed oral fluids. The porous wick material readily releases oral fluid to the lateral chromatographic strip. Prevention of reverse flow to the oral cavity from the lateral chromatographic strip naturally occurs due to the circuitous flow path of the porous wick material. By observing the lateral chromatographic strip while the entire test device is in the mouth immediate test results are obtained.